OneHealthPort|HIE

OHP HIE USER IMPLEMENTATION GUIDE

OneHealthPort Provider Directory (OPD)

REVISED: July, 2018

1   CONTENTS

2   OVERVIEW

Provider Directory Services:

The OneHealthPort health information exchange (HIE) has established a community provider directory database. The Provider Directory currently supports the following services:

1. The Clinical Data Repository (CDR) requires provider directory information in order to appropriately attribute practitioners to organizations.
2. Healthcare organizations qualifying for Meaningful Use Stage 2 must have the capability to exchange clinical information via Direct-address messaging. The Direct-address Provider Directory (DPD) will assist HIE users in the maintenance and exchange of Direct email addresses. Records from all organizations sharing Direct-address email information will be aggregated and distributed in a report to trading partners requesting this report. **NOTE**: Organizations' actual Direct messages for clinical information exchange will route via their respective certified Health Information Service Provider (HISP) services.

The OPD transaction data set can be used for one or both of the services noted above. The HIE will assume that file submissions with data populated in the Direct-address fields are intended for inclusion in the Direct-address Provider Directory report distribution.

A flat file format of the data will be submitted to the HIE. Input files will be full files (all provider directory records from an entity). Files can be submitted 24 hours/day and will be processed as received.   The HIE will respond to a submission with an acknowledgement (ACK) that the file was received and a deferred response once the file is processed. The deferred response will contain the count of successful messages and a line item error report for each record that did not load. The ACK file is an xml format; all other files will be flat file formats.

An aggregated file update can be pushed to all DPD participants by an automated process at OneHealthPort. Organizations will be able to determine whether they want to receive Direct-address provider directory outbound files from OneHealthPort.

OneHealthPort will extract Provider Directory information from the system for trading partners participating in the Clinical Data Repository and send the information to the CDR. No additional exchange is required by the trading partners.

2.1   SCOPE AND ASSUMPTIONS

The scope and assumptions for this transaction include:

a. Organizations that have executed a OneHealthPort HIE Participation Agreement
b. Organizations participating in the Clinical Data Repository

    c.   Organizations needing Direct-address information for entities, entity sub-parts and practitioners to support meaningful use exchange

    d.   All connections will be via the HIE and use an AS2 protocol for message exchange

    e.   Provider directory files inbound to the HIE from trading partners must be complete full files with every submission

    f.   Trading partners must submit Direct-address file content in order for their data to be included in the DPD aggregated report outbound from the Provider Directory

    g.   All outbound DPD files from the Provider Directory will be aggregated community full files from all trading partners submitting Direct-address information.

    h.   OHP HIE sends aggregated provider directory information to the Clinical Data Repository for trading partners participating with the CDR

3 TRANSACTION DETAILS

3.1 FILE FORMAT SPECIFICATIONS

All inbound and outbound files, except the acknowledgement, will be pipe ('|') separated files using the record layout identified in section 3.6 below. The ACK will be a standard xml format.
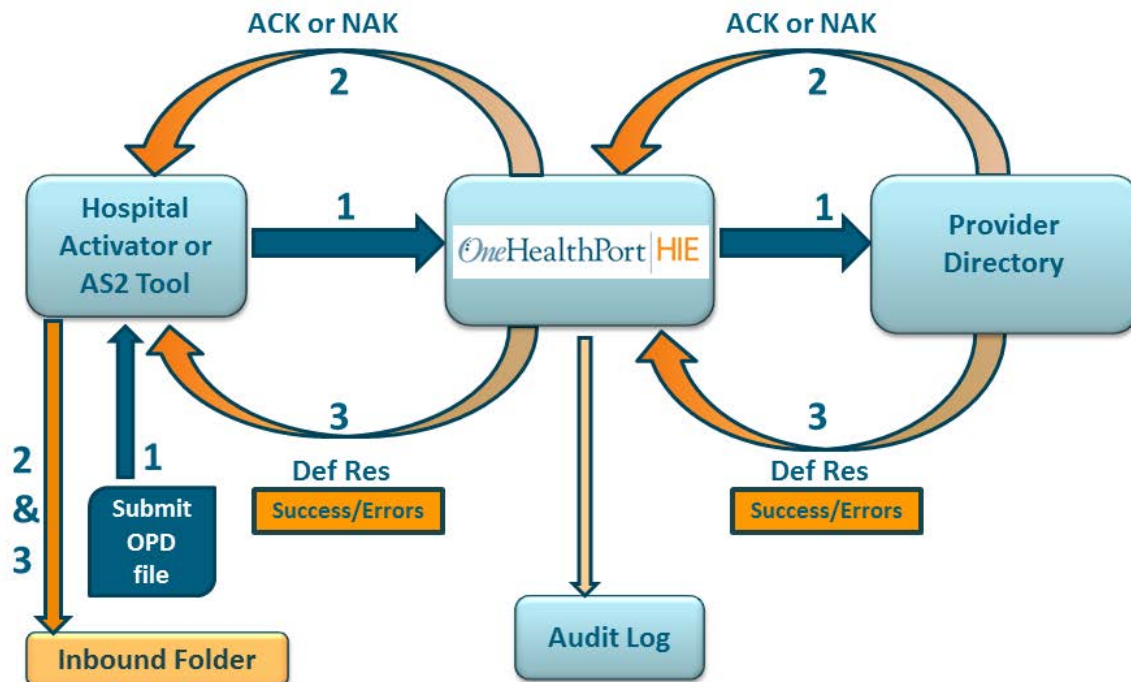
3.2 HIGH LEVEL PROCESS FLOW
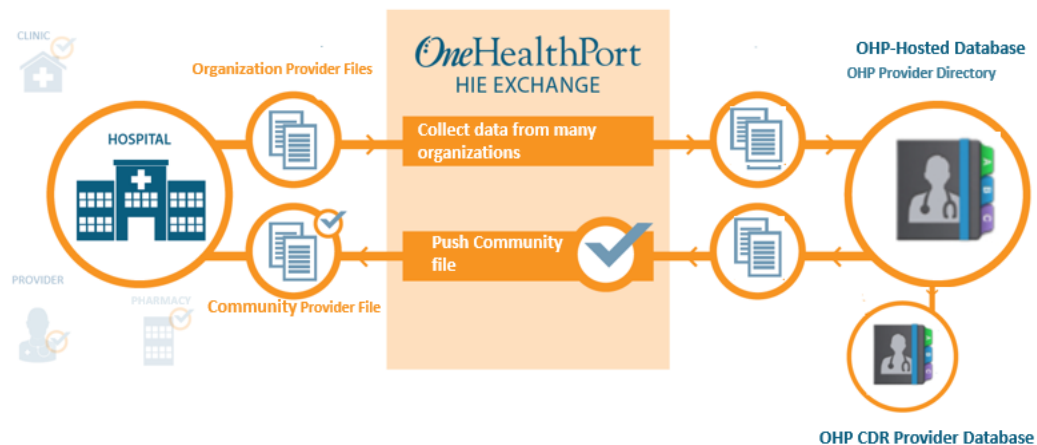
3.3 DATA FLOW

1. Prepared **OPD file** is submitted from the Activator or AS2 tools to the HIE where it is routed to the OneHealthPort hosted Provider Directory.
2. An **ACK** documenting receipt of the file is returned.
3. A **Deferred Response** is generated with success and errors on the file.

OPD Data Submission Flow

Separately,

- **Direct-address Provider Directory (DPD)** aggregated community file is generated and pushed to participating trading partners
- **Provider Directory** information is pushed to CDR for participating trading partners.

3.4   SETUP DETAILS

3.4.1   DATA PREPARATION

In order to support the above uses OneHealthPort requires the following data preparation **by the submitter** for data to be imported into the database:

- State name is two capitalized letters.
- First Name is a forced first letter cap.
- Last Name is a forced first letter cap.
- Middle Name or Initial is a forced first letter cap.
- Entity Organization Name and Subpart Name are forced first word cap.
- Provider Identifier Number fields follow the standard for that identifier (NPI, State License Number, etc.)
- Zip code is 5 digits or optional 5 plus 4 with hyphen added

3.4.2 ADDITIONAL FILE SPECIFICATIONS

- Fields where repeating values are allowed must be separated by a tilde (~). If a tilde is used as a part of a name, address or language, the word including the tilde should be surrounded by quotation marks. Example: "Peña"

- Every row in a file should include a complete set of delimited fields even if some fields are empty. Example entity record:

  EN|1.3.6.1.4.1.38630.2.1.1.15.3|OHP Test Hospital|M,2003 Western Avenue, Suite 600, Seattle, WA,98121~B,2001 Western Ave, Seattle,WA,98121 |917567567~971234123|1609816370| medrec@direct.OHPTestHospital.com|OneHealthPort_0|||206-624-3128 (Main)~206-624-3168 (fax)|183500000X|I|20140815

  In this example the entity organization has a mailing and a billing address listed, multiple TaxIDs and phone numbers. Optional fields of HC signing certificate and labeled URI are omitted but shown as "empty pipes". Record is inactive and inactive date is added.

- Empty fields are pipe delimited.

- One practitioner, sub-part or organization record per row.

- Each record row begins with a record type indicator: "PR" for Practitioner, "EN" for Entity or "SP" for Sub-Part.

- File should be ordered with header record first, followed by entity record(s), followed by sub-part record(s), followed by practitioner record(s).

- Lines should be separated by CRLF or LF (process will use a library that doesn't care whether Windows or UNIX style newline is used.)

- Preferably last field does not have a pipe (the input process will be resilient so it can handle too many pipes at the end of a line). Too few pipes will cause an error as that means missing fields.

- Do not include quotes unless you want those characters stored as part of the data

- OHP retains the right to reject files that do not contain all required fields.

3.4.3 BUSINESS RULES

The following business rules apply to data submissions.

1. A practitioner record with a name change will be updated as inactive and a new record created and submitted with the new name and an active status.
2. A period (.) will be submitted as the "first name" for the circumstances when a practitioner does not actually have first name in the usual convention.
3. Inactive records will be loaded for a year following the inactive date.
4. OneHealthPort will flag records inactive more than a year and exclude them from outbound files.
5. Each entity submitting files will eliminate duplicate active records for the same provider before submission.
6. Each entity submitting files will first test data uploads, deferred responses and validate their data in outbound files in the User Acceptance Testing (UAT) environment.

7. Date and time of file creation in the header record must be a time prior to the system submission time or the full file will error.

8. Some organizations do not have functionality to send inactivated provider record information. To accommodate this situation, the OPD inbound files are required to be full and complete with all active provider records with each submission. If provider records previously submitted do not exist in the current submission, the record previously reported will be marked as inactive in the OPD with a system assigned date matching the date the file current submission was received.

3.4.4 DATA VALIDATION WITHIN THE SERVICE

Data loads are validated at the field level using the following rules:

1. Zip code is 5 digit or 5 plus 4 and valid against postal tables of first 5 digits.

2. State is all Caps, USPS standard abbreviations.

3. TaxID is validated as a nine digit number (no dashes or spaces allowed)

4. NPI number is compliant with NPI standard of 10 digits with a correct check digit.

5. It is always preferred that NPI Taxonomy code use at least one standard Taxonomy code number for each record. Multiple NPI Taxonomy codes can be reported (tilde separated). NPI codes are validated against the NPI code set. In situations where Taxonomy code is not available and an NPI number has been provided in the record, organizations should send the taxonomy description in the HC Profession field as an alternative that satisfies the required condition.

6. OneHealthPort-Organization ID or OID is assigned to the data contributor and validated against a table of active OneHealthPort-Organization IDs/OIDs for file-loaded records.

7. Practitioner title is validated against the published table in this document.

8. Name suffix is a standard list. (II,III, IV, Jr, Sr)

9. All date fields are validated for format. No future dates/times accepted.

3.5 HEADER RECORD LAYOUT – INBOUND FILES

Each user-created file should contain a single header row with the following **header fields**:

- "HDR" (literal) is the first field in the header record indicating it is a header record.
- "OPD" (literal) is the file type specified by the HIE for routing/handling rules
- File Creation Date (yyyymmdd)
- Time (hhmmss)
- Record count
- OneHealthPort Organization ID (format is cccccccnn) (e. g. abc2so03)
- Name of Organization

The header field names do not appear in the header row. The header record is not counted in the record count.

Sample Header Record (for single entity submitting its own records)

HDR|OPD|20141118|143018|674|abc12300|Hometown Clinic

- The sample file was created for Hometown Clinic on November 18, 2014 at 2:30 PM and 18 seconds with 674 records. The OHP OrgID for Hometown Clinic is "abc12300".

The system will also accept records submitted by one organization on behalf of multiple organizations. In this situation, the submitting organization's identifier should be listed as the **FIRST** organization ID, and include the organization identifiers of all the entities represented in the file submission, separated by a comma. [**NOTE: the system will return the deferred response** (see section 3.13 below) **to the first entity listed in the OrgID string**]

Sample Header Record (for entity submitting on behalf of multiple organizations)

HDR|OPD|20151022|080000|25|defg4500**,**hiJk6700**,**LmN89P00|Hometown Accountable Care Organization

- The sample file was created by Hometown Accountable Care Organization on October 22, 2015 at 8:00 AM with 25 records. The OHP OrgID for Hometown Accountable Care Organization is "defg4500". Hometown Accountable Care Organization is submitting on behalf of two additional organizations whose organizations IDs are "hiJk6700" and "LmN89P00".

3.6   RECORD LAYOUT SPECIFICATION

The columns that appear in the tables are defined as follows:

Column	Description	Values
Field Name	The name of the field to be included in the data. - This value does not appear in the actual flat file - The header fields will appear in all files. Header field names do not.	
Field Type	The type of data contained in the field.	- Date (D) (ccyymmdd) - Time (T) (hhmmss) - Character (C) or mixed - Numeric (N) Integer 0-9 only
Field Length	The maximum field length	
Data Requirement	Indicates whether the field is required. In some cases a field is conditionally required and is enforced as optional.	- R – Always required. - C – Conditionally required. - O - optional
Description	General definitions and descriptions of the field values.	

There are three record types within the reported data set

- Entity = EN = the organization
- Sub-Part = SP = facility, department or workgroup within the organization – (OPTIONAL)
- Practitioner = PR = individual provider affiliated with the organization and/or sub-part

The tables below document the record layouts for the three record types:

4.5.1 Record Layout – Fields per Entity Record				
Field Name	Field Type	Field Length	Data Requirement	Description
Record type	C	2	**R**	EN = entity record
HIE OID	C	48	**R**	Each record must include the OneHealthPort assigned HIE OID for the organization.
Organization Name	C	50	**R**	Name of the submitting organization - first letter caps
Address	C	400	**R**	Multiple addresses accepted if tilde (~) separated see details of address layout. Specify address type: M = mailing, P = practice, B = billing. **Full Address String separated by comas: AddressType, addressLine1, addressLine2, city, state, postalCode**
TaxID #	N	9	**R**	Organization TaxID(s). No dashes or spaces. Repeating values accepted if separated by tilde (~). May begin with zero. Format validated for 9 digits.
NPI #	C	50	**O**	National Provider Identifier number – while not required **if the organization has an NPI #, please provide it.** Repeating values accepted if separated by tilde (~). Must follow NPI number format and check digit logic.
Medical Records DirectAddress	C	100	**O**	The Medical Records Dept Direct address is for secure message exchange and is assigned by the organization or their contracted HISP. This field looks like an email address but contains the "@Direct." In the email format. This field is assigned to an individual, department or group of individuals. Validate for "@Direct" in email format, also allowing for additional text in-between @ and direct (e.g. @ohp.direct.com). **Records that include Direct address information will be included in the outbound push for Direct-address Provider Directory (DPD) aggregated community reports.**
HC Signing Certificate			**O**	Public key and certificate for the user's non-repudiation signing certificate used for health transactions. No validation.
Labeled URI			**O**	Reference to an entry in a systems directory or to a services definition page where this individual has its electronic access points defined.

4.5.1 Record Layout – Fields per Entity Record

Field Name	Field Type	Field Length	Data Requirement	Description
Phone/Fax number(s)	C	32	R	At least one contact number required. Phone number format is nnn-nnn-nnnn followed by 20 characters for explanation or extensions. Repeating values accepted if separated by tilde (~). Validate for at least one phone number in correct format.
Taxonomy #	C	60	O	Primary specialty – use NPI Entity taxonomy code #. Repeating values accepted if separated by tilde (~).Recommended but not required to be included if an NPI number is shared. Taxonomy code validated against current NPI Taxonomy code set.
RecordStatus	C	1	R	Active = A, Inactive = I
InactiveDate	D	8	C	If record is inactive enter date of inactivity format = ccyymmdd . Validated for date format.

4.5.2 Record Layout – Fields per Sub-Part Record

Field Name	Field Type	Field Length	Data Requirement	Description
Record type	C	2	R	SP = sub-part record
HIE OID	C	48	R	Each record must include the OneHealthPort HIE OID assigned to the organization or a child OID for the Sub-part.
Sub-part Name	C	50	R	Name of the group, facility, department - first letter caps
Address	C	400	R	Multiple addresses accepted if tilde (~) separated see details of address layout. Specify address type: M = mailing, P = practice, B = billing. **Full Address String separated by comas: AddressType, addressLine1, addressLine2, city, state, postalCode**
TaxID #	N	9	R	Organization TaxID(s). No dashes or spaces. Repeating values accepted if separated by tilde (~). May begin with zero. Validated for 9 digit format if present. **If sub-part does not have its own TaxID, use organization's TaxID**
NPI #	N	50	O	National Provider Identifier number – while not required **if the organization has an NPI #, please**

4.5.2 Record Layout – Fields per Sub-Part Record				
Field Name	Field Type	Field Length	Data Requirement	Description
				provide it. Repeating values accepted if separated by tilde (~). Must follow NPI number format and check digit logic.
Medical Records DirectAddress	C	100	**O**	The Medical Records Dept Direct address is for secure message exchange and is assigned by the organization or their contracted HISP. This field looks like an email address but contains the "@Direct." In the email format. This field is assigned to an individual, department or group of individuals. Validate for "@Direct" in email format, also allowing for additional text in-between @ and Direct (e.g. @ohp.direct.com). **Records that include Direct address information will be included in the outbound push for Direct-address Provider Directory (DPD) aggregated community reports.**
HC Signing Certificate			**O**	Public key and certificate for the user's non-repudiation signing certificate used for health transactions. No validation.
Labeled URI			**O**	Reference to an entry in a systems directory or to a services definition page where this individual has its electronic access points defined.
Phone/Fax number(s)	C	32	**R**	At least one contact number required. Phone number format is nnn-nnn-nnnn followed by 20 characters for explanation or extensions. Repeating values accepted if separated by tilde (~).
Taxonomy #	C	60	**O**	Primary specialty – use NPI Entity taxonomy code #. Repeating values accepted if separated by tilde (~). **Recommended but not required to be included if an NPI number is shared**. Taxonomy code validated against current NPI Taxonomy code set.
RecordStatus	C	1	**R**	Active = A, Inactive = I
InactiveDate	D	8	**C**	If record is inactive enter date of inactivity format = ccyymmdd

4.5.3 Record Layout – Fields per Practitioner Record				
Field Name	Field Type	Field Length	Data Requirement	Description
Record type	C	2	**R**	PR = Practitioner

4.5.3 Record Layout – Fields per Practitioner Record

Field Name	Field Type	Field Length	Data Requirement	Description
HIE OID	C	48	R	Each record must include the OneHealthPort assigned HIE OID of the organization submitting the practitioner record.
Internal Provider ID	C	16	R	Your organization identifier for this individual practitioner if you wish to share it with trading partners or use it as a duplicate record check.
External Provider Identifier	N	60	R	At least one NPI or State License Number. Prefer NPI and Washington State License number when available. NPI=National Provider Identifier number. Must follow NPI number format and check digit logic. WAL= Washington State License Number. ORL=Oregon State License. (separated by tilde (~) if more than one in use.) Sample: NPI, 1932178819~WAL, MD00010129~ORL,MD6457A. NOTE: only 1 NPI number per PR record is allowed.
RecordStatus	C	1	R	A =Active, I= Inactive, R= Retired, D= Deceased (HPD defined)
InactiveDate	D	8	C	If record is inactive, retired or deceased enter date of inactivity format = ccyymmdd
Title	C	30	R	Title (MD, DO, RN, RPh, etc.) See table of abbreviations at end of this implementation guide (separated by tilde (~) if more than one in use.)
Name	C	400	R	Multiple names accepted if tilde (~) separated see details of name layout. Specify NameType: L= Legal, D = Display, C = Complete, O = Other. **Legal Name (L) is the required name type**, all others are optional. **Full Name String separated by comas: NameType, FirstName, MiddleName, LastName, NameSuffix.** Require comma after NameType, FirstName, MiddleName and making comma before Suffix (i.e. after LastName) optional, e.g. D,Billy,,Bob C,Billy,Jefferson Cody Elias,Bob,Sr Name suffix validation (Jr, Sr, II, III, IV). In situations where there is no first name the system will accept a period (.), in the first name position to indicate the practitioner does not have a first name.
HPD Provider	C	150	O	Language(s) that the provider is fluent in (separated by tilde (~) if more than one. Use ISO 639.2 English

4.5.3 Record Layout – Fields per Practitioner Record

Field Name	Field Type	Field Length	Data Requirement	Description
Language Supported				Names. http://www.loc.gov/standards/iso639-2/php/code_list.php
Gender	C	1	O	HL7 gender types (M = Male, F=Female, U=Unknown, O=Other)
DirectAddress	C	100	O	The Direct address is for secure message exchange and is assigned by the organization or their contracted HISP. This field looks like an email address but contains the "@Direct." In the email format. This field is assigned to an individual, department or group of individuals. Validate for "@Direct" in email format, also allowing for additional text in-between @ and Direct (e.g. @ohp.direct.com). **Records that include Direct address information will be included in the outbound push for Direct-address Provider Directory (DPD) aggregated community reports.**
HC Signing Certificate			O	Public key and certificate for the user's non-repudiation signing certificate used for health transactions. No validation.
Labeled URI			O	Reference to an entry in a systems directory or to a services definition page where this individual has its electronic access points defined.
Creation Date	D	8	O	Date of original record created for this use. CCYYMMDD format.
Last Update Date	D	8	O	Last date this record changed in the host system. CCYYMMDD format.
Physical Delivery Office Name	C	100	O	Facility name that a postal service uses to identify a practitioner's facility.
Address	C	400	R	Multiple addresses accepted if tilde (~) separated see details of address layout. Specify address type: M = mailing, P = practice, B = billing. **Full Address String separated by comas: AddressType, addressLine1, addressLine2, city, state, postalCode**
Phone/Fax Number(s)	C	150	R	At least one contact number required. Phone number format is nnn-nnn-nnnn followed by 20 characters for explanation or extensions. Repeating values accepted if separated by tilde (~). Use for Phone, Fax, Mobile, Pager with description

4.5.3 Record Layout – Fields per Practitioner Record

Field Name	Field Type	Field Length	Data Requirement	Description
				following number.
Taxonomy #	C	60	**C**	Required if NPI number provided. Specialty code – use NPI Provider taxonomy code #. Multiple accepted if separated by tilde (~). Information regarding taxonomy code # available at this site: http://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/MedicareProviderSupEnroll/Taxonomy.html Taxonomy code validated against current NPI Taxonomy code set. If this field is not available to the data supplier, the Taxonomy Description can be supplied in the HC Profession field as an alternative that satisfies the required condition.
HC Profession	C	300	**C**	This field is the Description from NPI Taxonomy record – specialty. It is optional if the Taxonomy code is supplied. Can be used if the Taxonomy Code is not available and an NPI number is reported. It will be populated in the outbound file based on what is provided if no Taxonomy code is provided. Whenever a Taxonomy code is provided, the outbound file will report the standard Description from the NPI code table regardless of what is provided in this field on the inbound file. Multiple accepted if separated by tilde (~). First letter capitalization will be enforced.
YOB	D	4	**O**	The Practitioner's year of birth. Date format of ccyy.
Credential	C	60	**O**	List of certifications, credentials or affiliations such as FACP, ACLS Multiple accepted if separated by tilde (~). No validation.

3.7   SERVICE RECORD LAYOUTS

Header Record:

HDR|FileType|date|time|record count|OHP-OrgID|Company name

Record count will produce a warning message if it does not match records loaded plus records erred but will not prevent data loading of the file. Header row should be excluded from record count.

Entity Record

EN|**OID**|**Entity Name**|**Address**|**TaxID#**|NPI#|DirectAddress|HC Signing Certificate|Labeled URI|**Phone #**|Taxonomy #|**RecordStatus**|**InactiveDate**

Sub-Part Record

SP|**OID**|**Entity Name**|**Address**|**TaxID#**|NPI#|DirectAddress|HC Signing Certificate|Labeled URI|**Phone #**|Taxonomy #|**RecordStatus**|**InactiveDate**

Practitioner Record

PR|**HIE OID**|**Internal Provider ID**|**External Provider ID**|**RecordStatus**|**Inactive Date**|**Title**|**Name**|HPD ProviderLanguage|**Gender**|DirectAddress|HC Signing Certificate|Labeled URI||**Creation Date**|**Last Update Date**|Physical Delivery Office Name|**Address**|**Phone#**|Taxonomy#|**HCProfession**|YOB|Credential

Color Key:

- Fields with **BLUE font** are required and have specific field validation requirements
- Fields with **RED font** are required and have no or minimal validation (first letter caps or all caps) but no content or format validation
- Fields with **ORANGE font** are optional validated fields. If date information is included, the format is validated
- Field with **GREEN font** may not be included in the inbound file but will be valued in the outbound file if a taxonomy code is provided on the record. Record layout is the same, field may be empty on the inbound file
- Grey highlighted fields are conditional fields and if provided will be validated
- Other fields are either optional, or conditional and not field validated but can create errors in other fields if omitted without a pipe delimiter

3.8   HIE SYSTEM SETUP

- HIE Mapping: Header only validation by HIE for four document types:
    - OPD = inbound file type for full or change records (Note: any record with this document type must be automatically delivered to the OneHealthPort Activator 7uycso00)
    - OHPHIEack = standard acknowledgement that file was received by OHP
    - OPD_defres = outbound deferred response from OHP hosted application to submitter
    - DPDRPT = outbound files from OHP for full file push to trading partners
    - OPDRPT = outbound files from OHP for full file push to CDR
- Any Timing Restrictions: Run anytime
- Delivery priority: Low – daily batch/Asynchronous transaction
- Trading Partner Requirements: Must have an HIE assigned routing ID and OID.
- What standard does this transaction follow: IHE HPD+ data set in a flat file format
- Secure Mailbox (SWM) incoming: OneHealthPort HIE non-priority
- Connectivity requirements/limitations: Activator or AS2
- Which environments: DEV, UAT, PROD, DR

- Priority in Disaster or partial system down: low

3.9 DATA LOADING PROCEDURE

Following are the basic steps to load a file into the OneHealthPort Provider Directory Service:

1. Confirm provider directory file is formatted according to the specifications.

2. Load the file in the "Out" folder of the Activator or send from organization's AS2 solution.

3. OneHealthPort sends an OHPHIEack that the file was delivered to the OneHealthPort application. Ack is delivered to "In" folder if using an Activator.

4. HIE database sends a Deferred Response (OPD_defres) indicating how many records were submitted, how many were successful and how many had errors. Each error will be reported as a separate record row. All error-free records are loaded.

3.10 SERVICE ACCESS AND SUPPORT

- The Service is available 24 hours a day seven days a week.
- The Service is fully load-balanced and redundant.
- Files loaded throughout the day are acknowledged when they arrive and are delivered to the OPD application.
- Submitted files are loaded as they arrive.
- Every submitted file will generate a deferred response (follows XDS.b convention). Any records that error will generate an error report that is returned to the submitting organization when the file is processed.
- A system automated process will be developed that creates an output aggregated community file and pushes to participating trading partners. Until that time, a file will be triggered manually when updates to the OPD file occur.
- If more than one file is submitted by an organization, all files will be processed in order of file time stamp (oldest to newest). No file limits/day.
- If no changes are input, the aggregated community file will be generated and delivered despite no changes to maintain standard automated procedures, once the automated process begins.

3.11 ACKNOWLEDGEMENT OF FILE DELIVERY

An ACK will generate for each delivered file. Below is a sample xml ACK. The ACK will arrive as soon as the OPD file is delivered. This is not an indication it has been loaded, just receipt for the file.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<OHPHIEack version="1.0">
        <Status>Delivered</Status>
        <Comments/>
        <HIEId>ZZOHPUAT</HIEId>
        <HIEName>OHP UAT</HIEName>
        <SenderId>7uycso03</SenderId>
        <SenderName>Rhonda May</SenderName>
        <ReceiverId>7uycso00</ReceiverId>
        <ReceiverName>OHP_OPD</ReceiverName>
```

<DeliveredTime>06-18-2014 11:02:01 PST</DeliveredTime>
<DocumentType>OPD</DocumentType>
<FileName>OPD@20140618_110000.csv</FileName>
</OHPHIEack>

3.12 ERROR REPORTS AND DATA VALIDATION ISSUES

This section is designed to assist data loaders with some basic tools for problem solving data loading issues.

1. Loaded files will accept all records that comply with all edits and error only those records with problems.
2. An error report will be returned with erred records listed with a line number based on sequential row in the data load for records excluding the header record.
3. Errors may be caused by a skipped field in a record impacting the data in the first field edited for content. Review for missing fields prior to the field identified in the error message if the identified field is valid. All blank fields should be "|" delimited.
4. The NPI # is tested for check digit validity as well as 10 digit length. If you wish to test an erred NPI # for check digit validity you can use any NPI check digit calculator such as the one provided for free at the following link: http://www.barrydebruin.com/php/npi/
5. The record layout key (in this document) provides the order of fields and highlights the fields that are validated during data loading.
6. The Direct Address is validated for correct email formatting including "Direct." Following the "@". The validation will provide for text in-between the "@" and "Direct". Sample, valid Direct email addresses are:

> jsmith@statehealth.direct-ci.net
> jsmith@direct.statehealth.com

3.13 DEFERRED RESPONSE FILE FORMAT

Once the file is loaded the system will produce a deferred response with the number of successful messages and any error messages. OneHealthPort supplies a pipe ('|') separated file.

- Each file will contain a single header row with the following **header fields**:

  - "HDR" is the first string in the header record indicating it is a header record.

  - "OPD_defres" is the file type specified by the HIE for routing/handling rules

  - File Creation Date (yyyymmdd)

  - Time (hhmmss)

  - Error Record count

  - OneHealthPort Organization ID(s) (format is cccccccnn). The routing id used for the deferred response will be the same routing id used in the header of the file submitted.

  - Name of Organization(s)

  - The header field names do not appear in the header row.

Example deferred response and header:

HDR|OPD_defres|20141118|023018|68|abc12300|Hometown Clinic|

Success|66|

Error1| Invalid Data: Record at index 2 has invalid value in the "NPI#" field|

Error2| Import Warning: Record count in header segment (HDR) does not match the number of records parsed|

In this example

- There were 68 records submitted and 66 were successfully loaded.
- There were two errors to report.
- There was an invalid "NPI number" field of record number 2 of the file.
- There was a warning message that the file header record count did not match the count of imported records.

Examples of possible Deferred Response data error messages

- Invalid Data: Record at index XX has an invalid value in the "OHP Identifier" field.
- Invalid Data. Record at index XX has an invalid value in the "State" field.
- Invalid Data. Record at index XX has an invalid value in the "zip code" field
- Invalid Data. Record at index XX has an invalid value in the "NPI#" field
- Invalid Data. Record at index XX has an invalid value in the "DirectAddress" field
- Invalid Data. Record at index XX has an invalid value in the "phone#" field
- Invalid Data. Record at index XX has an invalid value in the "taxonomy" field
- Invalid Data. Record at index XX has an invalid value in the "TaxID field
- Invalid Data. Record at index XX has an invalid value in the "Year of birth" field
- Import Warning: Record count in header segment (HDR) does not match the number of records parsed.

All error-free records will load.

All loaded files will receive a deferred response with an explanation of the file disposition.

4   OUTBOUND FILE LAYOUT

The outbound DPD file of all records submitted to the OneHealthPort OPD will follow a similar convention with a header record

- "HDR" is the first string in the header record indicating it is a header record.

- "DPDRPT" is the file type specified by the HIE for routing/handling rules of the outbound file

- File Creation Date (yyyymmdd)

- File creation Time (hhmmss)

- Record count

- Destination Routing ID

- OneHealthPort is the file creator

Sample Record header row:

- HDR|DPDRPT|20140914|143018|14674|abc12b00|OneHealthPort

The file layout will follow the same format/layout as inbound files with the addition of the HC Profession (Taxonomy description) field added by OHP based on a taxonomy code supplied by the record submitter.

Outbound files will deliver a copy of the aggregated community full file to all organizations setup to receive the DPD file. Routing will be managed by a routing look-up table for this file type.

5   FILE NAMING CONVENTIONS

The following file naming conventions will be used for the specific pipe-delimited flat files shared via the HIE as .txt files:

OPD File Type = **SenderID_OPD_datetime.txt** or **SenderID_OPD_datetime.csv** where the "datetime" is in the format YYYYMMDDhhmmss (for organizations submitting records to the HIE electronically). A file name example is: **7uycso00_OPD_20161130074030.txt**, or **7uycso00_OPD_20161130074030.csv**.

[NOTE: files submitted that do not use this precise file naming convention will not successfully process.]

ACK File Type = **OHPHIEack_OrgID_OPD_datetime.txt** (from the HIE for submitted files)

Deferred Response File Type = **OPD_DefRes_datetime.txt**   (from OHP to submitter on success of load)

OneHealthPort Outbound DPD Report File Type = **DPDRPT_datetime_ReceivingOrgID.txt**   (OneHealthPort outbound full files to participating organizations)

6   SUPPORT REQUIREMENTS

OneHealthPort HIE staff will manage first tier customer contacts and all communications via web forms and phone calls with HIE customers and vendors. The Axway Managed Service Organization (MSO) staff will be second tier working with OneHealthPort staff and coordinating any Cloud Team contacts needed. After hours calls for this transaction may be driven by engine down or engine not responsive due to backlog or volume and they should be handled by MSO staff notifying OneHealthPort staff to post system issue notices and respond to any customer contacts. Anticipate low support since daily files are batch changes only to provider directory. A specific item for this transaction has been to the OneHealthPort HIE Support Form.

6.1   SUPPORT DOCUMENTS/WORKFLOW/FORMS

7.1.1   Escalation Procedure: OneHealthPort HIE staff determine escalation based on investigation of message flow issues reported via web form. OneHealthPort HIE staff escalates to Axway Managed Services team using standard communications.

7.1.2   Support form: **http://www.formstack.com/forms/?1688456-sjNVJY8V7I**

7   POLICY IMPLICATIONS

Some data submitted to the database and shared with all participants could contain PII for the practitioners. Year of birth and cell phone are optional fields which could be shared. Most information shared is business information and public information available from other sources such as the NPI# and organization and facility information.

7.1   POLICY STATEMENT FOR THIS TRANSACTION

Any Personally Identifiable Information (PII) for practitioners will be handled as sensitive information according to OneHealthPort data handling policies. There is no Protected Health Information (PHI) in this dataset.

8   REVISION HISTORY

Date	Version	Author	Description of Change
08/17/2015	1.0	Sue Merk, Rhonda May	Initial draft for OPD transaction type.
10/22/2015	1.1	Rhonda May	Added information for one entity submitting records on behalf of several other entities.
11/30/2016	1.2	Rhonda May	Added clarifying information regarding required file naming convention and examples of file names.
7/20/2018	1.2	Rhonda May	Removed reference to Dimensions reporting tool.

9   TABLE OF TITLES

For practitioner records please insert one (1) of the following titles for use in title searches of practitioners.   New titles may be added to the service based on request. Titles will not use periods but will use hyphens. Records with titles not listed on the data spec will not be imported into the service and will generate an error in the deferred response.

- o   ARNP = Advanced Registered Nurse Practitioner
- o   AU = Audiologist
- o   CGC = Certified Genetics Counselor
- o   CMA = Certified Medical Assistant
- o   CNA = Certified Nursing Assistant
- o   CNM = Certified Nurse Midwife
- o   CNS
- o   CRNA
- o   DO = Doctor of Osteopathy
- o   DC = Chiropractor
- o   DDM
- o   DDS = Dentist
- o   DPM = Doctor of Podiatric Medicine
- o   DPT = Doctor of Physical Therapy
- o   EMT = Emergency Medical Technician
- o   HCA
- o   LAc = Licensed Acupuncturist
- o   LF = Marriage Family Therapist
- o   LH = Mental Health Counselor
- o   LPN = Licensed Practical Nurse
- o   MD = Medical Doctor
- o   MA = Medical Assistant
- o   MLT = Master Level Therapist
- o   MSW = Master Social Worker
- o   MS-1
- o   MS-2
- o   MS-3

- o MS-4
- o NA = Nurse Anesthetist
- o NP = Nurse Practitioner
- o OD = Doctor of Optometry
- o OT = Occupational Therapist
- o OTR = Occupational Therapist Registered
- o PA = Physician's Assistant
- o PA-C = Physician's Assistant, Certified
- o PharmD = Doctor of Clinical Pharmacy
- o PhD = Doctor of Philosophy
- o PT = Physical Therapist
- o RD = Registered Dietician
- o RN = Registered Nurse
- o RPh = Registered Pharmacist
- o RT = Respiratory Therapist
- o SLP = Speech Language Pathology
- o ST = Speech Therapist
- o SW = Social Worker
- o THER = Therapist